

Interagency Report on Orbital Debris

by

Office of Science and Technology Policy

November 1995

THE WHITE HOUSE

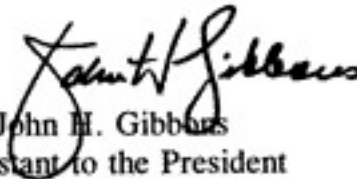
WASHINGTON

November 1995

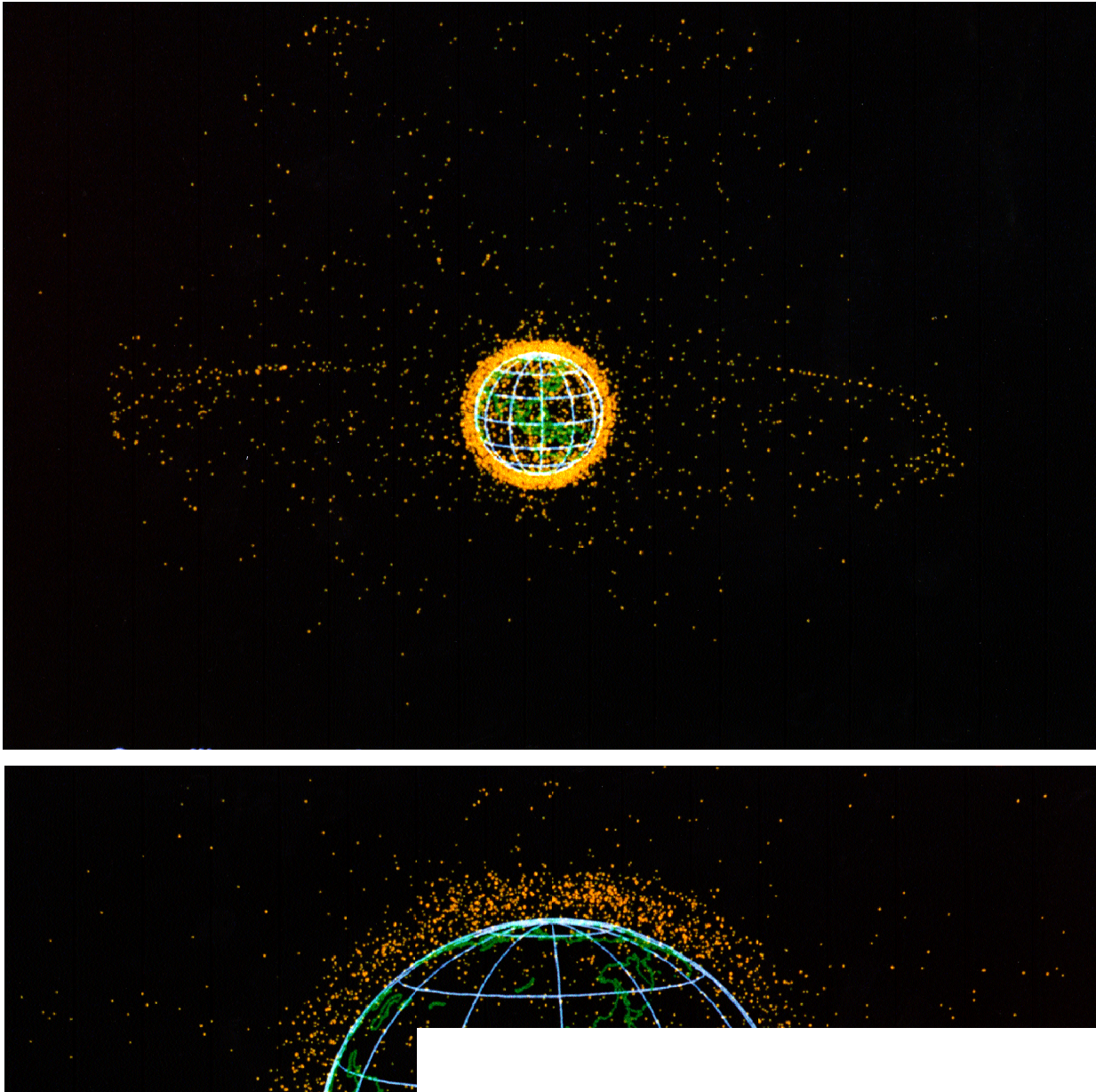
The use and exploration of space is vital to our civil, national security, and commercial interests. As the United States and other spacefaring nations continue to open the frontier of space, we must focus on new and better ways to monitor the current orbital debris environment and to reduce debris levels in the future.

During the past year, the National Science and Technology Council (NSTC), through the Committee on Transportation Research and Development, undertook an interagency review of the U.S. government's 1989 *Interagency Report on Orbital Debris*. As part of this process, the interagency review team also considered the results of the National Research Council orbital debris technical assessment study sponsored by the National Aeronautics and Space Administration.

This 1995 report updates the findings and recommendations of the 1989 report and reflects our progress in understanding and managing the orbital debris environment. It provides an up-to-date portrait of our measurement, modeling, and mitigation efforts; and a set of recommendations outlining specific steps we should pursue, both domestically and internationally, to minimize the potential hazards posed by orbital debris.



John H. Gibbons
Assistant to the President
for
Science and Technology

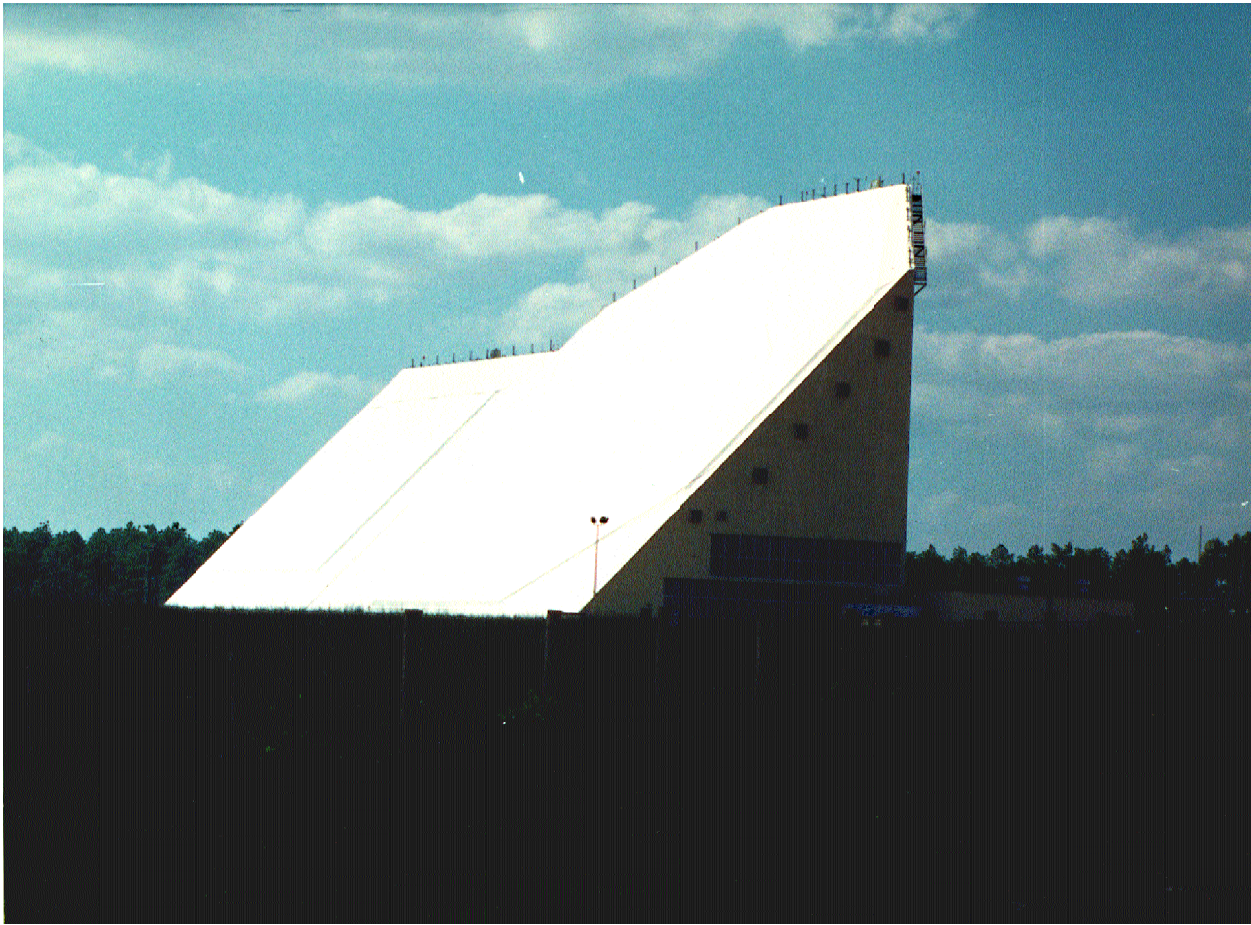


This computer-generated view illustrates the population of Earth orbit satellites on December 14, 1990, and is typical of such a view at any time. In the lower image are those in low Earth orbit predominantly below 2000 km. Most of the satellites are either at very high inclination, nearly crossing the poles, or at relatively low inclination, rarely going above thirty degrees latitude.

In the upper image the view is from far out in space; one can see the geostationary arc over the equator and the highly inclined Molnia orbits used by the Russians for communication at the very high latitudes.

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The FPS-85 phased array radar at Eglin AFB, Florida. This radar is a major Space Surveillance Network facility for tracking satellites and space debris. It is capable of tracking several different objects simultaneously.